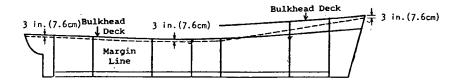
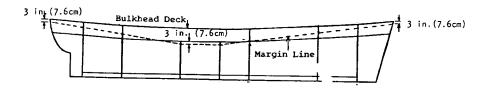
#### Figure 171.015(d)

### Margin Line for a Vessel With a Discontinuous Bulkhead Deck and With Side Shell Watertight to a Higher Deck





### §171.017 One and two compartment standards of flooding.

- (a) One compartment standard of flooding. A vessel is designed to a one compartment standard of flooding if the margin line is not submerged when the total buoyancy between each set of two adjacent main transverse watertight bulkheads is lost.
- (b) Two compartment standard of flooding. A vessel is designed to a two compartment standard of flooding if the margin line is not submerged when the total buoyancy between each set of three adjacent main transverse watertight bulkheads is lost.

#### Subpart B [Reserved]

#### Subpart C—Large Vessels

#### §171.045 Specific applicability.

This subpart applies to each vessel that fits into any one of the following categories:

- (a) Greater than 100 gross tons.
- (b) Greater than 65 feet (19.8 meters) in length.
- (c) Carries more than 12 passengers on an international voyage.
- (d) Carries more than 150 passengers.
- (e) The stability of which is questioned by the OCMI.

# § 171.050 Intact stability requirements for a mechanically propelled or a nonself-propelled vessel.

Each vessel must be shown by design calculations to have a metacentric height (GM) in feet (meters) in each condition of loading and operation, that is not less than the value given by the following equation:

$$GM = \frac{Nb}{(K)(W)(tan(T))}$$

where—

N=number of passengers.

W=displacement of the vessel in long (metric) tons.

T=14 degrees or the angle of heel at which the deck edge is first submerged, which ever is less.

b=distance in feet (meters) from the centerline of the vessel to the geometric center of the passenger deck on one side of the centerline.

 $K{=}24$  passengers/long ton (23.6 passengers/metric ton).

## § 171.055 Intact stability requirements for a monohull sailing vessel or a monohull auxiliary sailing vessel.

(a) Except as specified in paragraph (b) of this section, each monohull sailing vessel and auxiliary sailing vessel must be shown by design calculations to meet the stability requirements in this section.